U. S. DEPARTMENT OF COMMERCE

CIVIL AERONAUTICS JOURNAL

ISSUED TWICE MONTHLY BY THE
CIVIL AERONAUTICS ADMINISTRATION

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C. A. A. Appoints Fifty Inspection Representatives To Make Plane Examinations

Action Is Another Move Toward Decentralized Aircraft Inspection

Appointment of the C. A. A.'s first 50 "aircraft inspection representatives" to facilitate clearance of civil airplanes for flight after they have been repaired, has been announced by Charles I. Stanton, Acting Administrator of Civil Aeronautics.

The "inspection representatives" will serve, toward inspections of aircraft, substantially the same role that "flight examiners" have served in the testing of pilots—they will provide more points throughout the country at which airplanes which have undergone repairs can get a prompt inspection for use.

Creation of the "flight examiners" was made necessary by the large scale on which the C. A. A. pilot training program was turning out candidates for licenses—the rate last year being 13,000 to 14,000 every 4 months. This volume far exceeded the number which could be tested promptly by the C. A. A.'s limited staff of inspectors, so the inspectors were authorized to pick out and designate as examiners several hundred highly-qualified instructors, usually heads of flight schools whose verdict as to the competency of a student pilot could be relied upon. The examiners serve without pay, and regular C. A. A. inspectors "spot-check" candidates to make certain C. A. A. standards are being maintained.

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The use of flight examiners first was fostered more than a year ago by Robert H. Hinckley, now Assistant Secretary of Commerce, while he was Chairman of the Civil Aeronautics Authority.

(*See* INSPECTION, *page 191*)

Airline Passenger Traffic Analyzed In C. A. B. Survey

The Civil Aeronautics Board has issued a survey of airline passenger traffic revealing the principal characteristics of air-passenger travel in the United States during a test month, September, 1940.

Like the first such survey, taken in November, 1939, this report shows the origination and destination of every air passenger during the survey period. Traffic, in terms of number of passengers and passenger miles, is followed through its various routings from its originating station to its final destination. It is listed city by city in order of the air traffic importance of such cities, and intercity air traffic is similarly arranged by pairs of air stations.

The survey reveals a high concentration of traffic in a few large cities. In order of their traffic ranking, New York, Chicago, Washington, Detroit, Boston, Los Angeles, and Cleveland accounted for half the country's air passengers. The heaviest traffic was between New York and Boston, New York and Washington, New York and Chicago, Los Angeles and San Francisco, and Chicago and Detroit, these five routes amounting to over one-fifth of the U. S. total.

Many cities below the rank of leaders in number of passengers ranked relatively high in use of air mileage. Seattle, which ranked 14th in number of passengers, was eighth in miles traveled by passengers. The New York-Los Angeles intercity combination ranked 29th in passengers but was next to the New York-Chicago combination in the production of passenger-miles.

The increase shown in passenger travel over the first survey was approximately 70 percent. After making allowance for the fact that September traffic is typically about 30 percent higher than November traffic, a net increase of 40 percent is indicated. Twenty cities showed gains of over 200 percent.

Ranked according to the total volume of traffic, Detroit progressed from fifth place in November, 1939, to fourth place in September, 1940; Philadelphia increased from fourteenth to tenth place; Providence jumped from forty-fifth to twenty-first, and Hartford rose from forty-third to twenty-seventh.

Contrary to popular belief, airline passengers typically travel relatively short distances. Half the total number ride less than 250 miles, and only one-twentieth more than 1,000 miles. The average distance traveled is much higher in the west than in the industrial east, where major cities are relatively close together. When miles of travel are considered, Pacific coast cities rise sharply in importance.

It is anticipated that this survey will provide the Board and the air transport industry with vital information on which to base plans for the future.

Copies of the survey may be obtained from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

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CONTENTS

Alaska Designated As 8th Region of CAA Field Offices

Establishment of Alaska as the Eighth Region of the field offices of the Civil Aeronautics Administration has been ordered by Donald H. Connolly, Administrator of Civil Aeronautics. Regional headquarters will be at Anchorage, Alaska.

Headquarters of the present seven C. A. A. regions are: Region 1, Newark, N. J.; Region 2, Atlanta, Ga.; Region 3, Chicago, Ill.; Region 4, Fort Worth, Tex.; Region 5, Kansas City, Mo.; Region 6, Los Angeles, Calif.; Region 7, Seattle, Wash.

Text of the order setting up the new region follows:

"The Territory of Alaska is hereby established as the Eighth Region of the field offices of the Civil Aeronautics Administration. Regional Headquarters shall be located at Anchorage, Alaska, and the Region shall be under the jurisdiction of a Regional Manager, who shall be under the direction of the Administrator.

"Jurisdiction over personnel, equipment, records and available funds pertaining to operations in the Territory of Alaska hitherto administered by the Regional Manager of the Seventh Region is hereby vested in the Regional Manager, Eighth Region, subject to all applicable laws, regulations and established policies and standards.

"This order shall become effective 12:01 a. m., E. S. T., the 1st day of July, 1941."

Aeronautical Legislation Pending

Listed below are recent measures which are now pending before Congress. A complete list of all proposed legislation appeared in Civil Aeronautics Journal, volume 2, No. 11, dated June 1, 1941, and subsequent issues of the Journal. The compilation here brings this up to date.

S. 1716—DEVELOPMENT OF AVIATION (McCarran); a bill authorizing the advanced training in aeronautics of technical personnel of the Civil Aeronautics Administration; referred to the Committee on Commerce.

S. 1717—REGULATING LIGHTING OF AIRPORTS (McCarran); a bill to promote safety in the development of air commerce by regulating the lighting of airports and other landing areas; referred to the Committee on Commerce.

S. 1718—AIR-TRAFFIC CONTROL-TOWER OPERATORS (McCarran); a bill to provide for the training of air-traffic control-tower operators; referred to the Committee on Commerce.

H. RES. 272—DEPARTMENT OF AIR POWER (Beiter); a resolution to create a select committee to investigate and determine the advisability of creating an executive department in the Government to be called the Department of Air Power; referred to the Committee on Rules.

S. 1749—DEFENSE TRAINING (McCarran); a bill to promote the national defense and preparedness through the creation of a vast

(*Continued on next page*)

Toward Safer Flight

A vital function of the Flight Information Section of the Civil Aeronautics Administration is to take the guesswork out of flying. It renders an invaluable service to private as well as military pilots by furnishing up-to-the-minute information essential to intelligent planning and careful execution of cross-country flights. This involves the collection and presentation in concise form of a wealth of diversified data from numerous sources. This data, to be of full value, is constantly revised and made available to all pilots as quickly as possible.

To serve this purpose, the section issues six publications, as follows: WEEKLY NOTICE TO AIRMEN, AIR NAVIGATION RADIO AIDS, AIRWAYS RADIO FACILITY CHART, DANGER AREAS IN AIR NAVIGATION, DIRECTORY OF AIRPORTS, AND DIRECTORY OF SEAPLANE BASES AND ANCHORAGES.

The most important of these is the WEEKLY NOTICE TO AIRMEN, to which all pilots should constantly refer. It covers such subjects as the current status of airports, radio aids, lights, danger areas, and changes in Civil Air Regulations. It supplements and brings up to date the information contained in the other publications, issued at longer intervals. The C. A. A.'s national teletype system feeds a continuous stream of dispatches as to field and radio conditions, weather observations and forecasts, to the office of the section, enabling it to make almost instantaneous revisions in its bulletins to pilots. This service puts at the disposal of a pilot reliable "eyes and ears" far beyond the capacity of any one man's observation. He can plan his flight with a broader knowledge of all the factors involved, and thus with greater assurance of arriving at his destination safely and speedily. Guesswork and risk are reduced to a minimum.

AIR NAVIGATION RADIO AIDS is a monthly publication which should be carried on every instrument flight. In it are described all radio aids in the United States, its possessions, and Canada. It contains, among other features, station identification and frequency tabulations, and an atlas of United States and Canadian airways. On these airway charts are inscribed all aeronautical radio facilities, airway traffic control areas, minimum safe altitudes and mileages between designated radio fixes. The AIRWAYS RADIO FACILITY CHART, designed primarily to aid in the planning of cross-country flights, shows the inter-relation of all United States and Canadian airways and radio aids.

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Inspection

(*Continued from page 189*)

"The use of a sort of 'deputy inspector', carefully supervised by regular career inspectors, has been found so necessary in the testing of pilots," Mr. Hinckley said, "that we have now extended it to cover inspections of equipment also.

"Civil aircraft have become too numerous for our limited staff to inspect promptly. The result has been that on many occasions, planes have been kept on the ground awaiting the arrival of an inspector. This situation we want reduced to an absolute minimum.

"These aircraft inspection representatives represent our first substantial trial of this plan in the field of equipment. If the plan works satisfactorily, it will be expanded. The inspection representatives selected by our regular inspectors are technicians of known ability and integrity who are engaged full-time in the business of servicing aircraft. Our inspectors, of course, reserve the right to double-check the inspection representatives' verdicts whenever they desire. The whole idea is to speed up clearances.

"If civil aviation is going to be one-tenth as big as we're sure it is", he said, "we can't have it piling up behind regulatory bottlenecks. We must find ways to speed up the administrative process by spreading facilities for quick and efficient service more and more widely throughout the country—and doing this with as little bureaucracy as possible."

Mr. Stanton pointed out that with the aircraft inspection representatives helping handle the burden of routine work, the role of regular C. A. A. inspectors becomes more and more supervisory in character. He said the step is in line with numerous moves during the past three years by which the C. A. A. has sought to decentralize regulatory work, and to delegate more and more responsibility to the industry under proper safeguards. Contracting with colleges to give ground training and with commercial aviation firms for flight training is a part of this policy, he said. In the same way, the C. A. A. has contracted with university research laboratories to carry on technical studies.

Legislation

(*continued from preceding page*)

reservoir of potential airplane pilots and mechanics; referred to the Committee on Education and Labor.

H. R. 5327—DEFENSE TRAINING (Sutphin); a bill to promote the national defense and preparedness through the creation of a vast reservoir of potential airplane pilots and mechanics; referred to the Committee on Interstate and Foreign Commerce.

Legislative Action

H. RES. 125—AIR ACCIDENTS (Nichols); a preliminary report (Report No. 933) from the Select Committee to Investigate Air Accidents was submitted to the House; referred to the Committee of the Whole House on the State of the Union (July 10).

Air Transportation

New Stop Approved For Penn-Central

The Civil Aeronautics Board has amended the temporary certificate of public convenience and necessity of Pennsylvania Central Airlines Corporation to include Morgantown, W. Va., on its route No. 55, until such time as the Wheeling, W. Va., airport is approved for operations.

Route No. 55 extends from the terminal point Pittsburgh, Pa., via the intermediate points Wheeling and Charleston, W. Va., Bristol, Tenn.-Va., Knoxville and Chattanooga, Tenn., to the terminal point Birmingham, Ala. In addition, Pennsylvania Central was authorized on March 5, to provide temporary service to Clarksburg, W. Va., on Route No. 55, pending completion of the Wheeling Airport.

Air-Mail Service to Bermuda

The Post Office Department has announced the temporary suspension of air-mail service on the local route between New York and Bermuda. Air mails for Bermuda will be forwarded by the trans-Atlantic planes scheduled to leave New York Tuesday, Thursday, and Saturday at 9:30 a. m.

Board Dismisses 2 Complaints Against Canadian Airline

The Civil Aeronautics Board has announced its decision to dismiss complaints of two United States air carriers against Canadian Colonial Airways, Inc., with respect to service operated between Montreal, Canada, and Nassau, Bahamas. The Board held the carriage here involved is not air transportation within the meaning of the Civil Aeronautics Act of 1938, as amended.

The service complained of was first operated on January 17, 1941. It consisted of 8-day round-trip "all expense" tours from Montreal to Nassau, with the southbound trip from Montreal to Nassau being made with an overnight stop at Jacksonville, Fla. The Jacksonville stop eliminates the necessity of landing at night on the unlighted Nassau airport. All passengers are carried through to Nassau.

The crux of the complaints, filed by Eastern Air Lines, Inc., and Pan American Airways, Inc., was that such an operation was "air transportation" within the meaning of the Act, and therefore is an operation in which Canadian Colonial may not engage unless it obtains a certificate of public convenience and necessity.

New Aeronautical Publications

Among recent Government publications dealing with the subject of aeronautics are the following:

WAR DEPARTMENT — TECHNICAL MANUAL 1-415; airplane inspection guide. 113 pages. Price 20 cents. Classification number W 1.35: 1-415.

STATE DEPARTMENT—EXECUTIVE AGREEMENT SERIES 202; military and military aviation mission, agreement between the United States of America and Brazil. 11 pages. Price 5 cents. Classification number S 9.8: 202.

STATE DEPARTMENT—EXECUTIVE AGREEMENT SERIES 189; military aviation mission, agreement between the United States of America and Ecuador. 9 pages. Price 5 cents. Classification number S 9.8: 189.

When ordering these publications, send remittance by postal money order, express order, coupons, or check to the Superintendent of Documents, Government Printing Office, Washington, D. C. Always give title, issuing office, or classification number when listed.

Service

(*Continued from preceding page*)

DANGER AREAS IN AIR NAVIGATION shows all areas on record with the C. A. A. where flight hazards exist. They include military, naval, or civilian intensive training areas, and bombing, artillery, anti-aircraft, and aerial gunnery zones.

In the DIRECTORY OF AIRPORTS, issued yearly, are listed all the airports in the United States on record with the C. A. A., and specific information on their location and facilities. Information carried in the WEEKLY NOTICE TO AIRMEN is used in the revision of the DIRECTORY each year. The DIRECTORY OF SEAPLANE BASES AND ANCHORAGES furnishes similar information for seaplane and amphibian pilots.

The DIRECTORY OF AIRPORTS, AIR NAVIGATION RADIO AIDS, and the WEEKLY NOTICE TO AIRMEN, are all published in the same size so that they may conveniently be kept in a flight manual and carried in every plane used for instrument flight.

Private Flying

Parachute Inspection Problems Grow; List of 'Dont's' Issued to Aid Riggers

Increased CPT Activities Add to Usage, Wear

To help meet the many problems of inspection created by the greatly increased use of parachutes in connection with the activities of the Civilian Pilot Training Program, the Certificate and Inspection Division of the Civil Aeronautics Administration has released a list of suggestions to guide riggers.

This increased use has resulted in "accelerated aging" of parachutes, according to the release. Previously, the average parachute was used from 2 to 4 hours a day, whereas now most of them are in use about 10 hours a day. Troubles now come to light after a few months of service. Previously it took a year or two to disclose them.

Another direct problem is the increased burden on riggers arising from the greater number of parachutes in service. Because the capacities of civilian riggers have been taxed, the number of parachutes packed by Army and Navy riggers has increased.

The release further states that the great increase in the use of parachutes and the rapidity with which wear and service faults have been brought to the attention of the Civil Aeronautics Administration and manufacturers has also resulted in disclosures that many riggers were not packing parachutes in accordance with manufacturers' instructions and some were making disparaging remarks about parachute makes they did not like.

The list of "don'ts" contained in the release is offered "to establish a suitable 'yardstick' by which a rigger could be guided in determining the airworthiness of a parachute." Full explanations accompany each "don't."

The list includes such suggestions as:

Don't test the silk by the so-called "thumb" test. * * * This can only be done in the laboratory where proper testing equipment is available.

Don't be too hasty in condemning the silk because it doesn't appear as good in quality as silk you have been accustomed to handling a few years ago.

Don't be too quick to criticize the construction of the parachute.

Don't let operators and owners convince you without positive proof that during the course of a normal jump damage to the canopy and suspension lines was sustained.

Don't make up your own type of pack or harness to replace one that is badly worn on the parachute that has been left with you for repairs and packing. Furthermore, don't mix parts of one make or model parachute with similar parts of another make or model.

Don't make derogatory remarks to anyone about any type of parachute. All criticisms should be reported to the Chief of Aircraft Airworthiness Section, Civil Aeronautics Administration, Washington, D. C.

The full list of suggestions is contained in Certificate and Inspection Division Release No. 51, which may be obtained by writing to the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

Method for Stopping Small Aircraft Engines Suggested

A procedure for stopping small aircraft engines is described in C. P. T. Maintenance Bulletin, Powerplant No. 4, issued by the Standards Division of the Civil Aeronautics Administration.

The method which several Civilian Pilot Training flight contractors said they have used successfully in coping with the problem of backfiring of small engines after the ignition switch is moved to the "off" position is explained as follows:

In cases of engines with dual ignition, students are taught to taxi the airplane after landing with as little use of the brakes as possible, because it requires more throttle to overcome the retarding effect of the brakes, and to change the ignition switch from one system to the other at reasonable intervals in order to reduce the temperature of the spark plug insulators. Switching from one set of plugs to the other seems to overcome the tendency of the plug insulators to become incandescent, thereby causing preignition when the switch is turned to the "off" position. Upon reaching the flight line, the pilot should allow the engine to idle a very short time, using the set of plugs not last used in taxiing. This is done to reduce the temperature of the hottest set of plugs before the switch is turned off.

When the switches are turned off the throttle should be opened slowly, especially if the carburetor is equipped with an accelerating pump, in order to reduce any possibility of fire caused by leakage of gasoline from the carburetor scoop.

If this procedure is followed, there will be no harmful effects from the cooler air because it will be warmed sufficiently, on account of the high temperature of the engine and the fact that the engine was previously operated at low speed, to eliminate extremely rapid change in temperature of the valves and cylinder heads.

For single ignition engines, the recommended procedure is to use as little throttle as possible as the airplane nears the flight line, idle the engine for a very short period, then turn the switches off and gradually open the throttle. If the engine continues to run because of preignition, the switches should be turned on with the throttle closed and the engine allowed to idle for an additional half minute. The above procedure for stopping the engine should then be repeated.

No reports have been received indicating any unsatisfactory results on low powered engines when the above procedure was followed.

C. P. T. Superintendents and District Headquarters

Following are listed the regional superintendents of Civilian Pilot Training, as of July 1, 1941, and the headquarters for the various districts within each region:

Region 1—Frank G. Andrews, LaGuardia Field, New York, N. Y.; district 1, Administration Bldg., Municipal Airport, Portland, Maine; district 2, Albany Airport, Watervliet, N. Y.; district 3, Municipal Airport, Buffalo, N. Y.; district 4, Administration Bldg., Municipal Airport, East Boston, Mass.; district 5, Wertz Field, Institute, W. Va.; district 6, Hangar E, Roosevelt Field, Garden City, N. Y.; district 7, Hangar Bldg., Wings Field, Ambler, Pa.; district 8, State Airport, New Cumberland, Pa.; district 9, Allegheny County Airport, Pittsburgh, Pa.; district 10, College Park Airport, College Park, Md.

Region 2—Ralph R. DeVore, P. O. Box 4327, Atlanta, Ga.; district 1, Van Ness Bldg., Charlotte, N. C.; district 2, Peter O. Knight Airport, Tampa, Fla.; district 3, Municipal Airport, Birmingham, Ala.; district 4, City Auditorium, Jackson, Miss.; district 5, Municipal Airport, Nashville, Tenn.

Region 3—William E. Barton, 1204 New Post Office Bldg., Chicago, Ill.; district 1, 621 First Ave., Room 211, Fargo, N. Dak.; district 2, Wold-Chamberlain Field, Administration Bldg., Minneapolis, Minn.; district 3, Administration Bldg., Milwaukee County Airport, Cudahy, Wis.; district 4, Administration Bldg., Joliet Municipal Airport, Joliet, Ill.; district 5, Hangar 1, Peoria Municipal Airport, Peoria, Ill.; district 6, Roscoe Turner Aero. Corp., Municipal Airport, Indianapolis, Ind.; district 7,

Rooms 206, 208, 209, Administration Bldg., Columbus, Ohio; district 8, Aeroways, Inc., Cleveland Municipal Airport, Cleveland, Ohio; district 9, Room 4, Administration Bldg., Capitol City Airport, Lansing, Mich.

Region 4—E. C. Nilson, P. O. Box 1689, Fort Worth, Tex.; district 1, Room 231, Administration Bldg., Love Field, Dallas, Tex.: district 2, P. O. Box 1228, English Field, Amarillo, Tex.; district 3, Municipal Airport, Oklahoma City, Oklahoma; district 4, P. O. Box 146, Municipal Airport, Little Rock, Ark.; district 5, P. O. Box 2594, Municipal Airport, Houston, Tex.; district 6, P. O. Box 2340, Stinson Field, San Antonio, Tex.; district 7, P. O. Box 1538, West Mesa Airport, Albuquerque, N. Mex.

Region 5—Jess D. Green, 9th Floor, City Hall Bldg., Kansas City, Mo.; district 1, 120 Richards Road, Municipal Airport, Kansas City, Mo.; district 2, Box "L," Robertson, Mo.; district 3, Room 207–A, Old Federal Bldg., Des Moines, Iowa; district 4, Municipal Airport, Cheyenne, Wyo.; district 5, 726 Terminal Bldg., Municipal Airport, Lincoln, Nebr.; district 6, Municipal Airport, Wichita, Kans.; district 7, Administration Bldg., Municipal Airport, Denver, Colo.

Region 6—Carl F. Lienesch, P. O. Box 1010, Santa Monica, Calif.; district 1, Los Angeles Municipal Airport, Inglewood, Calif.; district 2, Grand Central Air Terminal, Glendale, Calif.; district 3, Oakland Municipal Airport, Oakland, Calif.; district 4, Salt Lake Municipal Airport, Salt Lake City, Utah; district 5, 1660 Hancock, San Diego, Calif.

Region 7—Robert W. Horsfield, King County Airport, Seattle, Wash.; district 1, Felts Field, Spokane, Wash.; district 2, Municipal Airport, Helena, Mont.; district 3, 326 Capitol Securities Bldg., Boise, Idaho; district 4, Swan Island Airport, Portland, Oreg.

Designation of Medical Examiners

During the month of June, 1941, the following named physicians were officially authorized to make physical examinations for the Administration:

ARKANSAS—Dr. Martin V. B. Russell, 216 Armstrong Bldg., El Dorado.

IOWA—Dr. Burr C. Boston, 738 Black Building, Waterloo.

MONTANA—Dr. Samuel S. Steinberg, Mayer Bldg., Butte.

NEW YORK—Dr. John G. Stubenbord, III, 38–30 Douglaston Parkway, Douglaston, and Dr. Albert W. Greene, Medical Arts Bldg., 146 Barrett St., Schenectady.

NORTH CAROLINA—Dr. Oscar L. McFadyen, Anderson & Old Streets, Fayetteville.

OHIO—Dr. Douglass S. King, 537 East Market Street, Alliance, and Dr. Roger S. Grimmett, 217 Park Place, Ashtabula.

OREGON—Dr. Dwight W. Gregg, 8203 North Denver Avenue, Portland.

PENNSYLVANIA—Dr. Floyd W. Shafer, Gilbert.

SOUTH CAROLINA—Dr. Leslie S. Hays, Hays Hospital, 25 Woodrow St., Clinton.

TEXAS—Dr. Dudley P. Laugenour, Medical Arts Bldg., Dallas; Dr. Festus J. Sebastian, 714 Medical Arts Bldg., Dallas; Dr. Pat Riley, Saxet Bldg, Mission; Dr. Clifford E. Painton, Knight-Painton Clinic, Port Arthur; and Dr. John R. Nicholson, 508 Medical Arts Bldg., San Antonio.

WASHINGTON—Dr. Barton E. Peden, 419 Stimson Bldg., Seattle, and Dr. Ralph W. Stevens, 408 Baker Bldg., Walla Walla.

WEST VIRGINIA—Dr. Lynwood G. Houser, 200 Bair Bldg., Beckley.

WISCONSIN—Dr. Roll O. Grigsby, 100 East Second, Ashland.

SOUTH AMERICA—Dr. Julio V. D'Oliveira Esteves, Olleros 3058, Buenos Aires, Argentina; Dr. Robert V. Barriere, San Jose 885, Montevideo, Uruguay; Dr. O. D. Gestido, Commandante Aerodromo, Capitan Boiso Lunza, Montevideo, Uruguay; Dr. Jose Maria Pena, Director of Civil Aviation, Ave. 18 Julio, 2137, Montevideo, Uruguay; and Dr. Francisco L. Sureda, Medico Cirujano, Calle, Nicaragua 1584, Montevideo, Uruguay.

Airline Medical Examiners

Dr. Dwight W. Gregg, 8203 North Denver Ave. Portland, Ore.

Dr. Dudley P. Laugenour, Medical Arts Bldg. Dallas, Tex.

Dr. Festus J. Sebastian, 714 Medical Arts Bldg. Dallas, Tex.

Dr. Julio V. D'Oliveira Esteves, Olleres 3058, Buenos Aires, Argentina, S. A.

Dr. Robert V. Barriere, San Jose 885, Montevideo, Uruguay, S. A.

Dr. O. D. Gestido, Commandante Aerodrome, Montevideo, Uruguay, S. A.

Dr. Jose Maria Pena, Ave. 18 Julio, 2137, Montevideo, Uruguay, S. A.

Dr. Francisco L. Sureda, Nicaragua 1584, Montevideo, Uruguay, S. A.

(*See* EXAMINERS, *page 195*)

Manufacturing and Production

Defense Aero Contracts

During the first week of July, War Department contracts for aircraft, engines, and parts cleared by the Office of Production Management totaled $592,297,567, as follows:

Wright Aeronautical Corp., Paterson, N. J.—aeronautical engines and parts (four contracts), $161,656,089.

Lockheed Aircraft Corp., Burbank, Calif.—airplanes and spare parts (two contracts), $92,602,290.

Douglas Aircraft Co., Santa Monica, Calif.—airplanes and spare parts (two contracts), $44,857,948.

Vega Airplane Co., Burbank, Calif.—airplanes and spare parts, $26,051,760.

Fairchild Engine & Airplane Corp., Fairchild Aircraft Division, Hagerstown, Md.—airplanes and spare parts, $1,037,543.

General Motors Corp., Allison Division, Indianapolis, Ind.—engines and parts, $41,366,880.

Nash Kelvinator Corp., Detroit, Mich.—propeller assemblies and spare parts, $15,237,500.

Pump Engineering Service Corp., Cleveland, Ohio—vacuum pump assemblies, $3,253,450.

Curtiss-Wright Corp., Airplane Division, Buffalo, N. Y.—airplanes and spare parts, $52,567,107.

Curtiss-Wright Corp., Curtiss Propeller Division, Caldwell, N. J.—propeller assemblies, controls and parts (seven contracts) $63,667,000.

Revised Part 04 Now Available

An April 1, 1941, revision of Part 04 of the Civil Air Regulations, AIRPLANE AIRWORTHINESS, is now available. Copies may be obtained from the Superintendent of Documents, Government Printing Office, for 15 cents each.

Civil Aeronautics Manual 04, dated February 1, 1941, which explains and enlarges upon sections of Part 04 of the CAR, may be obtained from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

New Models Added to Old Type Approvals

(Approval numbers and dates of approval of new models in parenthesis)

Pilot, 87W, wood, 7 ft. 3¼ in. diameter, 4 ft. 10 in. to 4 ft. 0 in. pitch, 125 hp, 2175 rpm. (Type Certificate No. 761, 6–21–41)

Hamilton Standard 2E propeller with 6227A–O blades, steel hub, aluminum alloy blades, 10 ft. 6 in. to 8 ft. 6 in. diameter, controllable pitch, 550 hp, 2400 rpm. (Type Certificate No. 377, 6–20–41)

Hamilton Standard 12D propeller with 6237A–O blades, steel hub, aluminum alloy blades, 9 ft. 6 in. to 7 ft. 6 in. diameter, controllable pitch, 550 hp, 2400 rpm. (Type Certificate No. 257, 6–20–41)

Hamilton Standard 3D propeller with 6237A–O blades, steel hub, aluminum alloy blades, 9 ft. 6 in. to 7 ft. 6 in. diameter, controllable pitch, 825 hp, 2100 rpm. (Type Certificate No. 249, 6–20–41)

Hamilton Standard 3E propeller with 6227A–O blades, steel hub, aluminum alloy blades, 10 ft. 6 in. to 8 ft. 6 in. diameter, controllable pitch, 1050 hp, 1790 rpm. (Type Certificate No. 246, 6–20–41)

Hamilton Standard 3E propeller with 6249A–O blades, steel hub, aluminum alloy blades, 13 ft. 0 in. to 11 ft. 0 in. diameter, controllable pitch, 1050 hp, 1790 rpm. (Type Certificate No. 246, 6–20–41)

Hamilton Standard 2D propeller with 6237A–O blades, steel hub, aluminum alloy blades, 9 ft. 6 in. to 7 ft. 6 in. diameter, controllable pitch 550 hp, 2400 rpm. (Type Certificate No. 206, 6–20–41)

Hamilton Standard 23E propeller with 6247A–O blades, steel hub, aluminum alloy blades, 10 ft. 6 in. to 8 ft. 6 in. diameter, hydromatic feathering pitch, 1164 hp, 2100 rpm. (Type Certificate No. 603, 6–20–41)

Hamilton Standard 23E propeller with 6447A–O blades, steel hub, aluminum alloy blades, 10 ft. 6 in. to 8 ft. 6 in. diameter, hydromatic feathering pitch, 1164 hp, 2100 rpm. (Type Certificate No. 603, 6–20–41)

Air Safety

Pilots Warned to See Bulletin Board At Airport Before Every Flight

Latest Information Given In Weekly Notice Helps To Promote Air Safety

Pilots were reminded to check their airport bulletin board before each flight in a safety bulletin issued recently by the Civil Aeronautics Board.

The bulletin emphasized the importance of keeping posted on the latest flight information contained in the Weekly Notices to Airmen, particularly for pilots planning a cross-country flight. Full text of the bulletin follows:

Examine Your Airport Bulletin Board Before Each Flight

Before every flight, especially cross-country, check your airport bulletin board for latest flight information. WEEKLY NOTICES TO AIRMEN are posted there. They advise of changes in field conditions, warn of any beacons which are "on the blink", and describe areas restricted by student training or national defense preparations—it is important in this respect, to watch for restricted areas. Today you not only protect yourself but, by observing the restrictions, you are cooperating in the national defense effort. At airports with Airways Teletype Stations the added service of immediate notification of changes is available. Local traffic rule changes and advices from the airport management are also found there.

Your government maintains a flight information service with the exclusive purpose of making your flying safer and more enjoyable. It's your service, so use it! Find out about landing or navigational hazards in advance and you won't get into unnecessary tight spots. That runway you used last fall may be a cement plant today. Don't guess, be sure. Check your bulletin board.

[INDIVIDUAL ACCIDENT REPORTS]

A Stall at Low Altitude

Dwight Schmidt, a Civilian Pilot Training Program student, was seriously injured in an airplane accident near Shubert, Nebr., on September 16, 1940. The airplane, a Piper, Model J5–A, received major damage.

The student was completing a cross-country flight from Auburn, Nebr., to Shubert, and landed in an alfalfa field near the town. About an hour later he attempted to take off toward the south into an eight m. p. h. wind. The airplane stalled at an altitude of about 50 feet as it neared the telephone lines which bordered a country road extending east and west along the south side of the field. Recovery was not effected before striking the ground.

Subsequent investigation revealed that the pilot had accumulated approximately 30 hours solo time.

Probable Cause.—Pilot stalled the airplane at low altitude.

Contributing Factor.—Inexperience of the pilot.

Bicycle Rider Crossing Runway Struck by Plane

Andrew Prokop, 13, was fatally injured when struck by an airplane while riding his bicycle across a runway of the Pittsburgh-Bettis Airport, Dravosburg, Pa., the morning of August 7, 1940. The airplane was a Piper, Model J3F–60. The pilot was James Taylor, Jr., who held a commercial certificate with 1 Land, 2S Land, and 3S Land ratings. He was a re-rated flight instructor and had logged a total of 584 solo flying hours, 45 of which had been flown in the last ninety days preceding the accident.

Instructor Taylor was accompanied by his student, Max Rodkey, when he took off toward the north on the north-south runway of the airport. A left turn was then made, and the airplane followed a rectangular flight path around the airport before entering a landing approach at an altitude of 500 feet over a point situated about 400 feet south of the airport boundary. It is indicated that at this time Prokop was riding across the airport near its south edge and in a westerly direction. The airplane had crossed the airport boundary headed north, and was leveling off for a landing when it struck the bicyclist who was then crossing the runway at a point approximately 200 feet from its south end. The right side of the landing gear of the airplane collapsed, causing the airplane to ground loop to the right.

Subsequent investigation disclosed that almost the entire south end of the north-south runway is suitable for use in a landing since that end of the field is elevated approximately 25 feet above the highway along the south boundary. The approach area is clear of obstructions. On the subject flight the airplane crossed the south boundary of the field at an altitude of about 10 feet. A witness to the accident states that the bicyclist started to pedal rapidly just before the collision occurred. No trespassing signs were posted around the airport. Neither of the occupants of the airplane saw the bicyclist prior to the collision.

Probable Cause.—Action of bicyclist in riding across the runway while airplane was approaching for a landing.

First Attempt To Fly Glider Results in Crash

Kermit Torrey was fatally injured in an accident near Wilton, Maine, on March 14, 1939. The records disclosed that Torrey had no flying time. The aircraft, a Mead Primary Glider, neither certificated nor registered, was demolished. It had been purchased by Kermit Torrey, Ralph Smith, and Hollis Smith in February 1939.

An automobile and about 200 feet of rope were used to tow the glider, with Torrey as pilot, for the take-off. Witnesses reported that the glider had attained an altitude of about 100 feet when it fell off to the right in a dive which continued until it struck the frozen surface of Wilson Lake in a partially inverted attitude.

The accident was not reported to the Safety Bureau, but was brought to the attention of the Bureau by another Government agency several months afterwards. Investigation disclosed that the glider was completely demolished, and was burned by its owners on the night after the accident. The subject flight was Torrey's first attempt to fly the glider.

Probable Cause.—Inexperienced pilot lost control of glider during his first flight.

Collision in Air

On August 18, 1940, shortly after 5:30 p. m., a Luscombe airplane, piloted by Student Pilot James Hewson, collided with an Aeronca airplane, piloted by Student Pilot Alvin Wood, at at altitude of about 1,200 feet near the Shandin Hills Airport, San Bernardino, Calif. Pilot Hewson, holder of a student certificate, was fatally injured as his damaged airplane struck the earth after assuming an inverted attitude and falling out of control. Pilot Wood, a student in the Civilian Pilot Training Program, was uninjured, and succeeded in effecting a safe landing with his damaged airplane.

Subsequent investigation revealed that Pilot Hewson, in the Luscombe, had nearly completed a circuit of the airport in a wide climbing right turn, which was in accordance with local field rules, when he overtook Pilot Wood in the slower Aeronca aircraft. Wood had also nearly completed his first circuit of the airport in a wide climbing right turn, after taking off a short time before Hewson. The evidence indicates that the Aeronca was slightly higher than the Luscombe when it was overtaken and that both aircraft were

headed in a westerly direction into the rays of the setting sun. Pilot Wood was not aware of the presence of the Luscombe until he felt the impact and later saw the crippled aircraft make a half roll before faling to the ground.

It further appears from the statements of witnesses and from the examination of the two aircraft that Pilot Hewson, upon observing the Aeronca just before the collision occurred attempted to veer away by placing his airplane in a left wing low, nose-down attitude. The Luscombe's vertical fin and right stabilizer, however, struck the right lift strut of the Aeronca. The resultant damage to the Luscombe tail group sufficed to render the airplane uncontrollable. The nature and limited extent of the damage to the Aeronca still permitted the pilot to execute a successful landing on the airport.

Probable Cause.—Failure of Pilot Hewson to observe and to avoid another airplane.

Failure To Observe Obstruction Causes Accident

Theodosia Fraser, a student in the primary Civilian Pilot Training Program at Virginia State College, was fatally injured in an accident which occurred near the Hopewell Municipal Airport, Hopewell, Va., on the afternoon of October 29, 1940. She was piloting a Taylorcraft airplane, model BLT 65, which was demolished. She held a student pilot certificate and had logged ten minutes solo flying time.

The student had made her first solo flight on the afternoon of the preceding day. The following morning she received a dual instruction flight and returned to the airport late that afternoon to fly solo again. Her instructor directed her to practice take-offs and landings and to follow a square flight pattern around the airport. A normal take-off was made; however, the evidence indicates that while flying on the leg parallel to the take-off direction she veered away from the airport. The engine was throttled after the pilot had traversed this leg to a point beyond the airport where she made a left turn. After she had completed this turn and entered a landing approach, the airplane, at an altitude of about 400 feet, lacked sufficient height to reach the airport. The glide was continued, however, to a point approximately 100 yards from the airport boundary where the landing gear went through the top of a tall tree. The airplane stalled and fell off to the right and the left wing tip struck a second tree as the airplane fell to the ground in a nearly vertical attitude. Power was applied immediately after the airplane struck the second tree; however, the application was ineffectual.

Investigation revealed no evidence of engine or structural failure prior to the accident. The condition of the damaged propeller indicated that power was being developed at the moment of impact. All control cables were found to be connected and the control surfaces, with the exception of the ailerons, were intact. The ailerons were damaged by the impact with the trees and with the ground.

Probable Cause.—Failure of pilot to observe and to avoid obstruction while approaching for a landing.

Contributing Factor. — Inexperience of the pilot.

Overshooting Field Results in Stall

Charles W. Burgess was seriously injured and his passenger, Orville Babcock, was slightly injured in an accident which occurred near the Robbinsdale Airport, Robbinsdale, Minn., about 3:55 p. m., on July 7, 1940. Burgess, who held a private pilot certificate with 1 Land and 2S Land ratings, had accumulated about 180 solo flying hours prior to the accident. The aircraft, an Aeronca, Model C-3, NC 15284, registered in the names of S. Chase and F. Berta, received major damage.

The pilot, while attempting a landing at the airport, overshot the field and attempted to go around and make a new approach. It is indicated that while he was circling the field, the aircraft stalled and settled into some trees, with resulting major damage.

Probable Cause.—Pilot stalled aircraft after overshooting field in landing approach.

Contributing Factor. — Faulty technique.

Lack of Gasoline Causes Crash

Running out of fuel caused the crash near Anderson, Calif., on July 7, 1940, in which Student Pilot Marion Flowers and his passenger-brother, Harry Flowers were fatally injured.

The accident occurred near their home in Anderson when the pilot attempted to turn at an altitude of less than 150 feet to land in a pasture. There was about a quart of gasoline in the fuel tank and little had spilled on the ground when the airplane was virtually destroyed.

Subsequent investigation revealed that the fuel tank had been filled with gasoline (12 gallons) the day before the crash and that the aircraft had been operated for about 30 minutes on that day and about 20 minutes on the day of the crash. The engine normally consumed about 4 gallons of gasoline an hour, thus indicating that there should have been about 8 gallons remaining in the tank. The aircraft had been stalled in a locked hangar, but a loose board was reevaled in one of the hangar walls. It was recalled that gasoline had been stolen from an airplane stored adjacent to the hangar the previous night. Examination of the engine revealed no evidence of structural failure prior to the accident. It is evident, however, that the engine was not running at the time of impact.

Probable cause.—Engine failure necessitating a forced landing under unfavorable conditions.

Notice

In the Civil Aeronautics Journal for April 15, 1941, page 99, a Safety Bulletin recommended that tubular fuel tank vents should face forward. Although this practice tends to increase the pressure on the fuel in flight and may thereby increase the fuel flow with low fuel level in the tank, it is likely to create additional hazards from icing or stoppage by dirt unless special precautions are taken in the design.

It is therefore recommended that tank vents be left as originally approved. However, if a fuel system continues to give difficulty even though properly maintained, the aircraft manufacturer and the Engineering Section of the Civil Aeronautics Administration, Washington, D. C., should be contacted in regard to devising a remedy.

Examiners

(*Continued from page 193*)

Secondary CPT Medical Examiners

Dr. Dwight W. Trowbridge, 2014 Tulare Street, Fresno, Calif.
Dr. William B. Smith, P. O. Box 537, Hartford, Conn.
Dr. Walker L. Curtis, 104 N. Main St, College Park, Atlanta, Ga.
Dr. S. Wallace Todd, 775 Madison Avenue, Albany, N. Y.
Dr. Dwight W. Gregg, 8203 North Denver Avenue, Portland, Ore.
Dr. Dudley P. Laugenour, Medical Arts Bldg, Dallas, Tex.
Dr. Festus J. Sebastian, 714 Medical Arts Bldg, Dallas, Tex.
Dr. John R. Nicholson, 508 Medical Arts Bldg, San Antonio, Tex.
Dr. Barton E. Peden, 419 Stimson Bldg, Seattle, Wash.
Dr. Lynwood G. Houser, 200 Bair Bldg, Beckley, W. Va.

The following physicians are no longer making examinations for the Administration at the cities indicated:

Dr. Joseph G. Mitchell, El Dorado, Ark.
Dr. John F. Gist, Lewiston, Idaho.
Dr. G. A. Held, Jasper, Ind.
Dr. Eugene Smith, Waterloo, Iowa.
Dr. George H. Lawyer, Ironwood, Mich.
Dr. Donald E. Hale, Butte, Mont.
Dr. George L. King, Alliance, Ohio.
Dr. Carl J. Streicher, Ashtabula, Ohio.
Dr. Henry F. Riedel, Portland, Oreg.
Dr. Malachi W. Sloan, East Stroudsburg, Pa.
Dr. Delmar O. Rhame, Jr., Clinton, S. C.
Dr. John S. Minnett, Dallas, Tex.
Dr. Thomas R. Burnett, Mission, Tex.
Dr. Paul R. Meyer, Port Arthur, Tex.
Dr. John D. Gleckler, San Antonio, Tex.
Dr. Samuel J. Newsom, Walla Walla, Wash.
Dr. Clyde A. Smith, Beckley, W. Va.

The following physicians are no longer listed as air line examiners:

Dr. Donald E. Hale, Butte, Mont.
Dr. Henry F. Riedel, Portland, Oreg.
Dr. John S. Minnett, Dallas, Tex.

The following physicians are no longer listed as secondary examiners:

Dr. Henry F. Riedel, Portland, Oreg.
Dr. John S. Minnett, Dallas, Tex.
Dr. Clyde A. Smith, Beckley, W. Va.

Airways and Airports

75 New Airports Approved by C. A. A. During First Six Months of Year

Number Is Greater Than Total for Entire 1940

Seventy-five new airports were approved for the nation's system of defense and civil landing fields between Jan. 1 and July 1 this year, as compared with only 51 added during the entire year 1940, Brig.-Gen. Donald H. Connolly, Civil Aeronautics Administrator, has announced.

This brings the total number of airports approved by the C. A. A. throughout continental United States to 2,277.

In addition to these new airports, more than 100 others throughout the country have been improved under the $40,000,000 program instituted last December. The numbers of airports in Classes 2, 3 and 4, which are of greater size with more adequate facilities, have increased in number while the Class 1 airports, the lowest category, have decreased by 166, since many of them have been improved until they are now in a better classification.

Airports are classified by runway lengths, as follows:

Class 1.—Runways 2,500 feet or less.

Class 2.—Runways between 2,500 and 3,500 feet.

Class 3.—Runways between 3,500 and 4,500 feet.

Class 4.—Runways over 4,500 feet long.

Many others will be added and improved before the end of the year, aided by a Congressional appropriation to the C. A. A. for building and improvement totalling more than 94 million dollars which became effective July 1.

Present approved ports include 1,035 municipal, 795 commercial, and 282 intermediate fields; 27 Navy and 74 Army, 41 miscellaneous Government fields, and 23 private landing fields. Of the total, 690 are either fully or partially equipped for night landings.

A great many of these new airports are being used primarily for training purposes. For example, in Texas, where the expansion was greatest—35 new airports having been added during the 6-month period—the majority is devoted to training fledgling pilots for the Army, Navy and Civil Aeronautics Administration.

Thirty-six new seaplane bases have been made available since January 1. These bases are for flying boats and seaplanes and have been installed under a joint program of the C. A. A. and the National Youth Administration. They are located along all the coasts and inland around the shores of the lakes and along rivers suitable for plane landing. Including the bases and anchorages of the Army, Navy, Coast Guard and Marine Corps, there were 325 the first of the year. Now there are 361, and of these 20 are equipped for night use.

A complete statistical summary of the status of airports, landing fields, and seaplane anchorages by states as of July 1, 1941, appeared in the Civil Aeronautics Journal, Vol. 2, No. 14, dated July 15, 1941.

Airport Projects Approved

In accordance with the provisions of section 303 of the Civil Aeronautics Act, the Administrator of Civil Aeronautics has issued certificates of air navigation facility necessity, authorizing the expenditure of Federal funds in the operation of the following projects:

ARKANSAS

Beebe, Abington Field (NYA)	$843
Conway, Municipal Airport (WPA)	116,730

ARIZONA

Phoenix, Sky Harbor Airport (WPA)	1,788

CALIFORNIA

Delano, Delano-Kern County Airport (WPA)	371,370
Long Beach, Dougherty Airport (WPA)	222,540

DISTRICT OF COLUMBIA

Gravelly Point, Washington National Airport (WPA)	400,000

FLORIDA

Fort Myers, Municipal Airport (WPA)	45,032
Orlando, Municipal Airport (WPA)	284,417

GEORGIA

Macon, Herbert Smart Municipal Airport (WPA)	48,902

INDIANA

West Lafayette, Purdue University Airport (WPA)	77,843

KANSAS

Kansas City, Fairfax Airport (WPA)	1,536,717
Wichita, Municipal Airport (WPA)	143,663

LOUISIANA

New Orleans, New Navy Field (CAA–WPA)	289,283
New Orleans, Alvin Callender Airfield (WPA)	189,094

MAINE

Millinocket, Municipal Airport (CAA–WPA)	248,321
Waterville, Municipal Airport (CAA–WPA)	227,801

MASSACHUSETTS

New Bedford, New Bedford Airport (WPA)	82,757
Westfield, Barnes Airport (WPA)	54,841
Westfield, Barnes Airport (CAA-WPA)	49,120

MICHIGAN

Grayling, Grayling Airport (WPA)	191,729
Menominee, Municipal County Airport (WPA)	107,561
South Haven, South Haven Airport (WPA)	25,247

MINNESOTA

Eveleth, Municipal Airport (WPA)	222,077
Hector, Municipal Airport (WPA)	23,610

MISSISSIPPI

Hattiesburg, Municipal Airport (WPA)	164,993
Meridian, Key Field (CAA-WPA-WAR DEPT.)	932,277

MONTANA

Wolf Point, Municipal Airport (WPA)	13,916

NEW JERSEY

Newark, Municipal Airport (WPA)	600,000

NEW MEXICO

Las Cruces, Municipal Airport (WPA)	20,449

NORTH CAROLINA

Burlington, Burlington Airport (WPA)	83,855
Burlington, Burlington Airport (WPA)	27,321
Lumberton, Municipal Airport (WPA)	73,718
Statesville, Municipal Airport (WPA)	108,568

OKLAHOMA

Oklahoma City, Lake Overholser Seaplane Depot (NYA)	2,558
Oklahoma City, Municipal Airport #2 (CAA-WPA)	487,000

OREGON

Portland, Portland-Columbia Airport (WPA)	250,000

PENNSYLVANIA

Mt. Pocono, Mt. Pocono Airport (NYA)	38,750
Reading, Municipal Airport (CAA-WPA)	416,840
Warren, Warren Airport (WPA)	3,241

RHODE ISLAND

Hillsgrove-Warwick, Theodore Francis Green Airport (WPA)	5,639

TEXAS

Conroe, Conroe Airport (WPA)	248,540
Cuero, Municipal Airport, (WPA)	41,361
Dallas, Love Field Airport (WPA)	46,361
Fort Worth, Industrial Airport (WPA)	901,101

UTAH

St. George, Municipal Airport (NYA)	192

WASHINGTON

Everett, Snohomish County Airport (WPA)	131,397

Port Angeles, Clallam County Airport (CAA-WPA)	5,591
Pullman, Pullman Airport (WPA)	42,121
WEST VIRGINIA	
Clarksburg, Harrison County Airport (WPA)	90,284
Parkersburg, Wood County Airport (WPA)	863,730
WYOMING	
Sheridan, Municipal Airport (WPA)	4,971

Aeronautical Charts

During June the following new editions of aeronautical charts were issued by the United States Coast and Geodetic Survey. Pilots are warned that the previous editions of the same charts are canceled and now are obsolete.

Regional and direction-finding (DF) charts are sold for 40 cents each, while sectional charts are 25 cents each. On orders grossing $10 or more, a 33⅓ percent discount is allowed. Copies of these charts may be obtained from the Coast and Geodetic Survey, Washington, D. C., and from recognized dealers at major cities and airports.

New Alaskan Aeronautical Chart

Fairbanks.—June 1941. Size, 32 by 37 inches. Located in latitude 61°30′–66°40′ N., longitude 140°–157° W., an area of about 185,000 square miles. This is the third chart of the Alaska series, lithographed in 14 colors, showing names of topographic features in black; contours in brown; roads and trails in purple; water areas in blue; airports, isogonic lines and radio facilities in red; radio ranges in pink; and elevation gradients in 7 tints.

New Editions of Regional Aeronautical Charts

16–M.—May 1941. Size, 19 by 37 inches. Located in latitude 28°–32° N., longitude 87°30′–97°W., an area of about 119,000 square miles. Accumulation of changes since last edition.

17–M.—May, 1941. Size, 32 by 33 inches. Located in latitude 25°–32° N., longitude 80°–87°30′ W., an area of about 270,000 square miles. Danger areas added and accumulation of changes since last edition.

New Edition of Sectional Aeronautical Chart

Grand Junction.—June 1941. Size, 20 by 43 inches. Located in latitude 38°–40° N., longitude 108°–114° W., an area of about 52,000 square miles. Accumulation of changes since last edition.

Airports of Entry

On July 15, 1941, there were 56 airports and seaplane bases designated as airports of entry through which aircraft arriving in the United States, its Territories, or Insular possessions, may clear customs and immigration.

Airports of entry are designated by the Treasury Department after consultation with representatives of other interested Federal agencies and due consideration as to the necessity for such designation. Some are designated without time limit, while others are given temporary designation for the period of 1 year, as shown in the table below:

Without time limit

Location	Name	Location	Name
Ajo, Ariz.	Municipal Airport.	Miami, Fla.	Dinner Key Seaplane Base.
Akron, Ohio[1]	Do.	Nogales, Ariz.	Nogales Municipal Airport.
Albany, N. Y.	Municipal Airport.	Ogdensburg, N. Y.	Ogdensburg Harbor.
Brownsville, Tex.	Municipal Airport.	Pembina, N. Dak.	Fort Pembina Airport.
Buffalo, N. Y.	Do.	Portal, N. Dak.	Portal Airport.
Caribou, Maine	Caribou Municipal Airport.	Port Townsend, Wash.	Port Townsend Airport.
Cleveland, Ohio	Cleveland Municipal Airport.	Put-in-Bay, Ohio	Put-in-Bay Airport.
Detroit, Mich.	Detroit Municipal Airport.	Rochester, N. Y.	Rochester Municipal Airport.
Do.	Ford Airport.	Rouses Point, N. Y.	Rouses Point Seaplane Base.
Do.	Wayne County Airport.	San Diego, Calif.	San Diego Municipal Airport (Lindbergh Field).
Douglas, Ariz.	Douglas Airport.	San Juan, P. R.	Isla Grande Airport.
Duluth, Minn.	Duluth Municipal Airport.	Seattle, Wash.	Boeing Municipal Airport.
Do.	Duluth Boat Club Seaplane Base.	Do.	Lake Union.
Eagle Pass, Tex.	Eagle Pass Airport.	Skagway, Alaska	Skagway Municipal Airport.
El Paso, Tex.	Municipal Airport.	Swanton, Vt.	Missisquoi Airport.
Fairbanks, Alaska	Weeks Municipal Airfield.	West Palm Beach, Fla.	Roosevelt Flying Service Base (Currie Common Park).
Juneau, Alaska	Juneau Airport.	Wrangell, Alaska	Wrangell Seaplane Base.
Ketchikan, Alaska	Ketchikan Airport.		
Key West, Fla.	Meacham Field.		
Laredo, Tex.	Laredo Airdrome.		
Miami, Fla.	Pan-American Field (or 36th St.).		

[1] Not an airport of entry for aliens.

Temporary (1 year)

Location	Name	Date designated
Alexandria Bay, N. Y.	{Thousand Islands Club Airport / Alexandria Bay Seaplane Base}	May 1, 1941
Bangor, Maine	Bangor Municipal Airport	June 26, 1941
Buffalo, N. Y.	Buffalo Launch Club Seaplane Anchorage	Oct. 16, 1940
Burlington, Vt.	Burlington Municipal Airport	June 29, 1941
Calexico, Calif.	Calexico Municipal Airport	Jan. 10, 1941
Cape Vincent, N. Y.	Cape Vincent Harbor	Apr. 25, 1941
Fort Yukon, Alaska	Fort Yukon Airfield	July 6, 1941
Great Falls, Mont.	Great Falls Municipal Airport	June 2, 1941
Havre, Mont.	Havre Municipal Airport	Do.
Houlton, Maine	Houlton Airport	Oct. 7, 1940
Malone, N. Y.	Malone Airport	Apr. 18, 1941
Miami, Fla.	Chalks Flying Service Airport	Sept. 17, 1940
Niagara Falls, N. Y.	Niagara Falls Municipal Airport	July 2, 1941
Sandusky, Ohio	John G. Hinde Airport	June 1, 1941
Sault Ste. Marie, Mich.	Sault Ste. Marie Airport	Aug. 4, 1940
Spokane, Wash.	Spokane Municipal Airport (Felts Field)	June 2, 1941
Warroad, Minn.	Warroad Seaplane Base	Sept. 2, 1940
Watertown, N. Y.	Watertown Municipal Airport	June 2, 1941

Recognized Dealers

Following is a list of recognized dealers in United States Coast & Geodetic Survey aeronautical charts, corrected to July 15, 1941:

ALABAMA

Birmingham—Municipal Airport—Southern Airways, Inc.
Mobile—Bates Field—Oak Air Service, Inc.

ARIZONA

Phoenix—Sky Harbor Airport—Sky Harbor Air Service, Inc.

CALIFORNIA

Burbank—Union Air Terminal—Pacific Automotive.
Glendale—Grand Central Air Terminal—Air Associates, Inc., 1100 Airway Drive.
Los Angeles—Fowler Bros., 414 West 6th St.
Oakland—Oakland Airport—Boeing School of Aeronautics.
Oakland—Oakland Airport—Pacific Airmotive.
San Francisco—U. S. Coast & Geodetic Survey, 307 Customhouse.
Stockton—Morris Brothers, 15 & 17 N. Hunter St.

COLORADO

Denver—Municipal Airport—Airport Manager, 32nd & Ulster Sts.

DELAWARE

Wilmington—Atlantic Aviation Service, P. O. Box 1952.

DISTRICT OF COLUMBIA

Washington—U. S. Coast & Geodetic Survey, Room 1128, Commerce Bldg.

FLORIDA

Miami—Miami Airport—Embry-Riddle Co., Box 668.
Orlando—Cannon Mills Field—Florida Aeronautical & Supply Co., P. O. Box 2308.
St. Petersburg—Municipal Airport—Aviation Sales & Service.

GEORGIA

Atlanta—Municipal Airport—Aviation Supply Corp., P. O. Box 57, Hapeville.
Augusta—Daniel Field—Southern Airways, Inc.

ILLINOIS

Chicago—Municipal Airport—Air Associates, Inc., 5300 West 63rd St.
Chicago—Snyder Aircraft Corp., 5036 W. 63rd St.
Springfield—Municipal Airport—Springfield Aviation Co., Inc.

INDIANA

Indianapolis—Municipal Airport—Roscoe Turner Aeronautical Corp.
South Bend—Bendix Field—Indiana Air Service, Inc.

(Continued on next page)

Turntables at Washington Airport Add to Ease of Positioning Planes

Familiar Railroading Device Put to New Use

A familiar device from railroading has been adapted to modern air transport at the new Washington National Airport, world's most modern commercial landing field which is scheduled to be opened this month.

Turntables are installed at 12 stations along the semicircular loading ramp in front of the terminal building at the new port, and spaced about each are four pits from which planes are serviced.

Visitors to airports have marvelled at the dexterity with which pilots maneuver huge transport planes, bringing their wheels, through the use of wing motors and individual wheel brakes, into narrow alleys painted on the concrete. This procedure is not difficult but when the plane must turn a complete circle after it has taxied to the loading station, there is a severe strain on the tire and landing gear of the wheel used as a pivot. As planes get larger, this strain becomes more serious. The turntables will protect these parts and make positioning of the plane easy and efficient.

The turntables consist of a 1-inch-thick circular iron saucer, 6 feet in diameter, cupped in the middle for better positioning of the wheel. This saucer is mounted at its circumference on a steel track which rests on 16 rollers, and these rest on the supporting circular track below. The pilot, having placed his wheel in the center of the saucer, locks it with his foot brake and brings the plane around to its proper position for loading by using his opposite wing motor.

Also, the newest in airport control tower design, and in lights for airport traffic control, will feature the equipment at the airport. Out of the experience of heat-treated, sunburned traffic-control tower operators, and a group of glass, light, and radio experts, the tower and its equipment was designed.

The walls of the tower are all of glass, with the upper and lower halves of each wall set outward at an angle of about 90° to each other. This setting avoids all reflection of ground lights, plane lights, sun, moon, and stars. Each section is fitted with a window wiper, operated manually from inside. The glass is especially heat-absorbing, excluding the heat of the sun and retaining inner heat. It has a green tinge, preventing glare, and it reflects sunburning actinic rays, a bane to most of the Nation's control tower operators. The tower is air-conditioned.

Radio equipment in the tower consists of transmitter and receivers for two-way communication with planes, and the automatic device which makes a record of every conversation between the tower operator and pilots.

Recognized Dealers

(*Continued from preceding page*)

IOWA

Des Moines—Municipal Airport—Iowa Airplane Co., P. O. Box 59.
Sioux City—Municipal Airport—Beacon Airways.

KANSAS

Topeka—Municipal Airport—Topeka Flying Service.

KENTUCKY

Louisville—Bowman Field—Louisville Flying Service, Inc.

LOUISIANA

New Orleans—U. S. Coast & Geodetic Survey, 314 Customhouse, 423 Canal St.
New Orleans—New Orleans Airport—Henry B. Chapman.
Shreveport—Municipal Airport—Airport Manager, P. O. Box 28.

MAINE

Waterville—Municipal Airport—Airways, Inc.

MARYLAND

Annapolis—Weems System of Navigation.
Baltimore—Logan Field (Municipal Airport)—City of Baltimore.
Baltimore—Curtiss Wright Airport—W. D.
Baltimore—Tipton, Lessee, Smith & Greenspring Aves.
Hagerstown—Hagerstown Airport—Henson Flying Service.

MASSACHUSETTS

Boston—U. S. Coast & Geodetic Survey, 10th floor, Customhouse.
Norwood—Metropolitan Airport—E. W. Wiggins Airways, Inc.

MICHIGAN

Detroit—Detroit City Airport—General Aircraft Supply Corporation.
Romulus—Wayne County Airport—Wayne County Flying Service, Inc.

MINNESOTA

Duluth—Williamson-Johnson Airport—H. L. Peterson.
Minneapolis—Minneapolis Municipal Airport—64th St. & 34th Ave. S.

MISSOURI

Kansas City—Missouri Aviation Corp., 416 Admiral Blvd.
St. Louis—Lambert Airport—Supply Division, Inc., Robertson.
St. Louis—Lambert Airport—St. Louis Flying Service, Inc.

NEBRASKA

Omaha—Municipal Airport—Krantz Airways, Inc., S. F. Krantz.

NEW HAMPSHIRE

Concord—Concord Municipal Airport—William E. Martin.

NEW JERSEY

Bendix—Bendix Airport—Air Associates, Inc.
Newark—Newark Airport—Newark Air Service, Inc.
West Trenton—Mercer Airport—Capital Air Service.

NEW MEXICO

Albuquerque—West Mesa Airport—Cutter-Carr Flying Service.

NEW YORK

Brooklyn—Floyd Bennet Field—Aeronautical Trading Company.
Buffalo—Floyd
Buffalo—Municipal Airport—Buffalo Aeronautical Corporation.
Garden City, L. I.—Roosevelt Field—Pacific Airmotive.
Garden City, L. I.—Roosevelt Field—Air Transport Equipment, Inc., Bldg. 20.
New York—C. S. Hammond & Company, Inc., 1 East 43rd St.
New York—International Map Co., Inc., 90 West St.
New York—U. S. Coast & Geodetic Survey, 620 Federal Office Bldg.
Rochester—Municipal Airport—Airport Manager, 54 Court St.
Schenectady—Schenectady Co. Airport—George C. Haven, Asst. Mgr.

NORTH CAROLINA

Charlotte—Municipal Airport—Charlotte Flying Service, Inc.

OHIO

Cincinnati—Lunken Airport—Cincinnati Aircraft Service, Hangar No. 2.
Cleveland — Municipal Airport — Sundorph Aeronautical Corporation.
Columbus—Port Columbus—John T. Corrodi, Inc., Box 185, Bexley Station.
Dayton—Municipal Airport—Moore Flying Service, P. O. Box 753.

OKLAHOMA

Oklahoma City—Oklahoma City Air Terminal—Airport Manager.
Tulsa—Spartan Aircraft Company.

OREGON

Portland—Swan Is. Airport—S & M Flying Service, Box 4043.

PENNSYLVANIA

Erie—Port Erie Airport—Manager, Port Erie Corp.
Lock Haven—Cub Haven Airport—Piper Aircraft Corporation.
Meadville—Port Meadville Airport—Graham Aviation Flying School.
Philadelphia—J. L. Smith Company, 1603 Sansom St.
Pittsburgh—Pittsburgh-Bettis — Pittsburgh Institute of Aeronautics, R. F. D. Homestead.
Scranton—Scranton Airport—Scranton Airways, Inc., R. F. D. No. 1, Clarks Summit.
York—Karl Ort, 608 West Poplar St.

RHODE ISLAND

Providence—State Airport—E. W. Wiggins Airways, Inc., P. O. Box 1089.

SOUTH CAROLINA

Charleston—Municipal Airport—Hawthorne Flying Service.
Columbia—Municipal Airport — Hawthorne Flying Service, Inc.
Greenville — Greenville Airport — Southern Airways, Inc.

SOUTH DAKOTA

Sioux Falls—Sioux Skyways, Inc.

TENNESSEE

Memphis—Municipal Airport—Southern Air Services, Inc.
Nashville — Municipal Airport — Nashville Flying Service.

TEXAS

Amarillo—English Field—C. H. Knupp, Mgr.
Big Spring—Big Spring Municipal Airport.
Dallas—Love Field—Air Associates, Inc.
Dallas—Range Data, Inc., P. O. Box 1752.
El Paso—El Paso Airport—P. O. Box 681.
Fort Worth—Meacham Field—Ritchey Flying Service.
Houston—Municipal Airport—J. D. Reed Company.
San Antonio—Stinson Field—Hangar Six, Inc.
Wink—Airmen's Specialty Company, 200 Hendrick Blvd.

UTAH

Salt Lake City—Salt Lake—Thompson Flying Service, Inc.

VIRGINIA

Roanoke—Municipal Airport—Virginia Airmotive.

(*See* RECOGNIZED DEALERS, *page 200*)

CIVIL AERONAUTICS BOARD

OFFICIAL ACTIONS

Abstracts of Opinions, Orders, and Regulations

FOR THE PERIOD JULY 1–15, 1941

ORDERS

ODDER No. 1122 *July 1, 1941*

Suspended for 60 days private pilot certificate No. 45801–40, held by Mettauer E. Davidson, Jr., Raleigh, N. C., for piloting an aircraft over a congested area at an altitude of less than 1,000 feet and other violations of the Civil Air Regulations. (Opinion and Order).

ORDER No. 1123 *July 2, 1941*

Denied applications of Pan American-Grace Airways, Inc., and Pan American Airways, Inc., for authorization to furnish reduced rate transportation to Professor James A. Cuneo from Buenos Aires, Argentina, to Miami, Fla.

ORDER No. 1124 *July 3, 1941*

Approved an agreement between American Airlines, Inc., United Air Lines Transport Corp. and Transcontinental & Western Air, Inc., (Contract C. A. B. No. 197) relating to an increase in sleeping charges.

ORDER No. 1125 *July 7, 1941*

Dismissed the complaints of Eastern Air Lines, Inc., and Pan American Airways, Inc., against the operation of certain air service by Canadian Colonial Airways, Inc., between Montreal, Canada, and Nassau, Bahamas. (Opinion and order—Docket No. 601).

ORDER No. 1126 *July 9, 1941*

Granted the request of The Aviation Corporation to withdraw its application for an order determining that the conversion of certain debentures of American Airlines, Inc., into common stock, and the retention of stock are not subject to the Board's approval, or an order approving such conversion and retention.

ORDER No. 1127 *July 10, 1941*

Temporarily exempted Pacific Alaska Airways, Inc., from certain provisions of the Civil Aeronautics Act and the terms of its certificate of convenience and necessity insofar as these provisions might require it to serve Ketchikan, Alaska.

ORDER No. 1128 *July 10, 1941*

Amended the temporary certificate of public convenience and necessity issued to Pennsylvania-Central Airlines Corp. for Route No. 55 authorizing service to and from Clarksburg, W. Va., so as to include service to and from Morgantown, W. Va. (Opinion and order—Docket 572)

ORDER No. 1129 *July 11, 1941*

Suspended for 60 days private pilot certificate No. 30980–40, held by Robert Joseph Bentson, Jr., San Diego, Calif., for piloting an aircraft acrobatically on a civil airway at an altitude of approximately 600 feet and other violations of the Civil Air Regulations.

Notice

The CIVIL AERONAUTICS JOURNAL carries in this section an abstract of all orders, economic regulations, and rules, and a syllabus of all opinions issued by the Civil Aeronautics Board during the half month ending 2 weeks prior to the date of publication.

ECONOMIC OPINIONS

All opinions of the Board in economic proceedings are printed individually. They may be obtained on a subscription basis. These are "advance sheets" of the material which later will make up bound volumes of CIVIL AERONAUTICS BOARD REPORTS.

The subscription price for each volume of advance sheets of opinions is $1. Remittance should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C.

Such subscriptions are governed by the quantity of pages rather than by specific periods of time. Current subscriptions include all opinions issued since June 30, 1940, and will continue until the consecutive pagination reaches approximately 800.

NOTE.—Advance sheets of economic opinions also may be purchased individually. As each opinion becomes available in printed forms, the title of the case, docket number, order number, date, and price will be listed here. All orders must be sent to the Superintendent of Documents.

Opinions in cases of suspension, revocation, or denial of airman certificates are available in mimeograph form only. Verbatim copies of these may be obtained by addressing a request for each individual order and opinion desired to the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

ORDER No. 1130 *July 11, 1941*

Suspended for 90 days student pilot certificate No. S–210383, held by Walter Samuel Eberlein, Fresno, Calif., for piloting an aircraft within 50 feet of the ground exclusive of taking off and landing, and other violations of the Civil Air Regulations.

ORDER No. 1131 *July 11, 1941*

Suspended for 60 days private pilot certificate No. 30632–40, held by Emerson W. Hill, San Diego, Calif., for piloting an aircraft acrobatically carrying a passenger who was not equipped with a parachute and other violations of the Civil Air Regulations.

ORDER No. 1132 *July 11, 1941*

Revoked student pilot certificate No. 173495, held by James L. Crosby, Thomasville, Ga., for piloting an aircraft carrying a passenger other than a certificated instructor in violation of the Civil Air Regulations.

ORDER No. 1133 *July 11, 1941*

Revoked student pilot certificate No. S–11899, held by John Price Hoberman, Columbus, Ohio, for piloting an aircraft carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1134 *July 15, 1941*

Revoked student pilot certificate No. S–103738, held by Adolph Charles Gropper, Woodside, N. Y., for piloting an aircraft carrying passengers other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1135 *July 15, 1941*

Revoked private pilot certificate No. 68776, held by Emil O. Schauermann, Baltimore, Md., for piloting an aircraft acrobatically on a civil airway and flying at an altitude of less than 500 feet on a civil airway and other violations of the Civil Air Regulations.

ORDER No. 1136 *July 15, 1941*

Revoked student pilot certificate No. S–258830, held by Sidney Wright, Spokane, Wash., for piloting an aircraft over a congested area at an altitude of approximately 100 feet and other violations of the Civil Air Regulations.

ORDER No. 1138 *July 15, 1941*

Authorized the taking of depositions in the complaint against John H. Nance,

Jr., alleging various violations of the Civil Aeronautics Act of 1938 and the Civil Air Regulations.

ORDER No. 1139 *July 1, 1941*

Authorized Pan American Airways Co. (Del.) to suspend indefinitely its local service between the United States and Bermuda.

ORDER No. 1140 *July 1, 1941*

Exempted Pan American Airways Co. (Del.) from the provisions of section 405 (e) of the Civil Aeronautics Act, insofar as such provisions would otherwise prevent its schedules showing the suspension of local service between the United States and Bermuda from becoming effective on July 1, 1941.

REGULATIONS

REGULATION No. 172 ..... *July 3*

Adopted Special Regulation Extending Time of Requirement of a Means to Stop Engine Rotation in Flight. Full text of the regulation, which is to be inserted following p. 12, Part 40 of the Civil Air Regulations, is as follows:

"Notwithstanding the provisions of section 40.3320, an applicant for an air carrier operating certificate for the carriage of goods (including mail) in interstate air transportation shall not be required to show until on or after August 1, 1941, that any aircraft to be used in such air transportation which have engines with maximum power ratings of 480 h. p. or more are so equipped that engine rotation mat be promptly stopped during flight."

Recognized Dealers

(*continued from page 198*)

WASHINGTON

Seattle—U. S. Coast & Geodetic Survey, 601 Federal Office Bldg.
Seattle—Boeing Field—Washington Aircraft Transport Corp.
Seattle—Merrell Aviation Ground School, 1413 25th North.
Tacoma—Hubert & Dillon Air Service, Inc., Box 177–S.

WEST VIRGINIA

Huntington—Mayes Field—H. G. Mayes, Manager.

WISCONSIN

Milwaukee—Milwaukee County Airport—Midwest Airways, Inc., Box 147, Cudahy.

U. S. GOVERNMENT PRINTING OFFICE: 1941